

# TEACHERS' PERCEPTIONS OF OTHER TEACHERS' SPONTANEOUS HAND GESTURING IN THE EFL CLASSROOM

## John Michael THOMPSON<sup>1</sup>

Abstract: The evidence for gesture being a vital element in the classroom is becoming insurmountable; however, it remains to be seen how long it will take to be fully utilized in the EFL classroom. This study, using a qualitative descriptive methodology, briefly examines how a group of teachers perceive gesturing after viewing a video performance of an EFL practitioner. All of the data was collected online via a questionnaire and a recorded semi-structured interview. Volunteers were, or had been, teaching English within the past twelve months and approached the researcher to take part in the study via social media. The results of the study suggest that teachers fully acknowledge the importance of gesture and commonly attribute similar functions to specific gestures within a teaching performance. Overall, the results offer numerous pedagogical implications for gesture and SLA and support previous assertions regarding the need to make teachers fully aware of the gestures they use in the classroom. Analysis of the questionnaires also revealed that teachers seldom have the opportunity to view their own teaching and suggests that gesture needs to play a much greater role within critical reflective practice.

**Keywords:** English as a foreign language (EFL), gesture, nonverbal behaviour, nonverbal communication

Özet: Jestlerin sınıf ortamında çok önemli bir öğe olduğuna dair kanıtların her geçen gün artmasına rağmen, onlardan yabancı dil olarak İngilizce sınıflarında tam olarak ne zaman yararlanacağımız henüz belli değildir.Nitel bir yönteme dayanan bu çalışma, bir grup öğretmenin bir yabancı dil olarak ingilizce öğretmenin video kaydını izledikten sonra jestleri nasıl algıladıklarını incelemektedir. Veri, bir anket ve kayıt altına alınan yarı yapılandırılmış görüşmeler yoluyla internet ortamında toplanmıştır. Gönüllüler son bir ay içerisinde İngilizce öğretiyorlardı veya öğretmişlerdi ve bu çalışmada rol almak için araştırmacıya sosyal medya aracılığıyla ulaşmışlardır. Çalışmanın sonuçları göstermektedir ki öğretme sırasında öğretmenler jestlerin önemini kesinlikle kabul etmektedirler ve çoğunlukla belirli jestlere belirli işlevleri atfetmektedirler. Genel olarak, sonuçlar jest ve ikinci dil edinimine dair çeşitli eğitimsel öneriler sunmaktadır ve öğretmenlerin sınıfta kullandıkları jestlerin tamamen farkında olmalarına yönelik açıklamaları desteklemektedir.Anketler, öğretmenlerin kendi öğretimlerini izleme imkanlarının sınırlı olduğunu açıklamaktadır ve jestlerin çok daha önemli bir rol oynaması gerektiğini göstermektedir.

Anahtar sözcükler: Yabancı dil olarak İngilizce, jest, sözsüz davranış, sözsüz iletişim

#### 1. Introduction

.

The vast majority of SLA research in the EFL classroom has surrounded teacher talk and comprehensible verbal output, and little attention has been given to the gesturing that supplements teacher talk. Indeed despite several decades of research into nonverbal behaviour, the role that gesture plays in teaching and learning within the EFL classroom remains a relatively unchartered territory for SLA researchers in spite of being credited with "being just as crucial as the words that are spoken" (Lazaraton, 2004, p. 81).

There are many variables that can influence a teacher's gesturing; however, a study that explores the perceptions of teachers and their understanding of gesturing in the

<sup>&</sup>lt;sup>1</sup>Lecturer, English Department, Military Technological College, Oman, john.thompson@mtc.edu.com

EFL classroom has the potential to influence how a language is taught and assessed. Stam (2006) has suggested the need to examine both a learner's speech and their accompanying gesture in order to fully determine a learner's progress and their L2 proficiency. With this in mind, teachers need to be made aware of their own gesturing as some teachers may over-gesticulate, which could prevent learning from taking place (Olsher, 2008). Being made aware of their gesturing style could enable teachers to alter course materials, the methods of assessment could be changed, and meaningful and relevant professional development imparted to staff. This may in turn help to improve relationships in class, enhance students' motivation and confidence levels both inside and outside of class, and assist them in acquiring a higher L2 proficiency rating in the process.

Teachers gesture frequently no matter how experienced the teacher is (Neill & Caswell, 1993) and the "gestures teachers produce can have an impact on what their students take from a lesson" (Goldin-Meadow, 2004, p. 320). Scholars have already speculated about teachers being made aware of the gestures they use in the classroom (Allen, 2000; Barnett, 1983; Goldin-Meadow, 2004; Sime, 2006); however, "it is not clear if all teachers understand the importance of gestures in the classroom" (Hostetter et al., 2006, p. 1524) nor is it clear as to the extent that all teachers use gesturing effectively in their lessons.

Gesture is multifaceted and it would be folly to examine all of the literature surrounding it; therefore an attempt has been made to focus on its relevance to learning. With this in mind the following sections, after this introduction, will examine why we gesture and the classification of gesture types, along with discussing how extensive a role it plays in social communication, before moving on to addressing the structure and methodology of the study. The study concludes with a discussion about the implications for teaching and learning along with suggestions for future collaborations.

#### 1. 1. Why do we gesture?

Gesture is thought to have appeared as one of the earliest forms of communication. Corballis (1999) has suggested that gesture survives today as a "behavioural fossil" that is intricately connected to speech. In reality it would be very difficult to prove that language evolved from gesture, but it may be logical to surmise that both gesture and speech could have been combined and still exist concurrently in language use (Kelly, 2008). In fact, it is so well assimilated into everyday communication that the majority of people have never considered the multitude of functions they are capable of accomplishing as gestures can be fleeting and varied, and contain multiple forms for communicating different emotions and thoughts.

Gesture has been strongly associated with playing an essential part in the communicative process whereby it can either accompany or act independently of speech (Iverson & Goldin-Meadow, 2000). Some gestures are more idiosyncratic and difficult to recognize than others due to their cultural specificity, for example, 'la mano caliente' (the hot hand) is considered to be extremely offensive in Guatemala (Neuliep, 2009), but would pass unnoticed in other parts of the world. Other gestures are more discernable and universal, such as the 'thumbs-up' gesture.

#### 1. 2. Teachers' gesturing

The few empirical studies in the nonverbal behaviour of teachers suggest that gesturing occurs frequently; under various guises and performs various pedagogical tasks (Allen, 1995; 2000; Lazaraton, 2004). For instance, the gesturing of a teacher is thought to have intrapersonal advantages – from promoting a more encouraging atmosphere (Allen, 2000; Stam & McCafferty, 2008), to heightening students' attention (McCafferty, 2002; Ward & von Raffler-Engel, 1980), and ultimately to altering a "teacher's approachability, likability, professionalism and involvement" (Quinlisk, 2008:38-39).

Scholars have also proposed that by using gesture "teachers scaffold students' comprehension of instructional language and, in doing so, foster students' learning of lesson content" (Alibali & Nathan, 2007, p. 351). A further role may lie in creating zones of proximal development (ZPD), which may increase the number of learning opportunities within a lesson (McCafferty, 2002). Gestures can also present additional clarification for struggling students with more advanced theories in subjects such as biology (Pozzer-Ardenghi & Roth, 2007). Further research by Acredolo and Goodwyn (1988) found that learners, once taught a gestural system, could talk sooner and with a wider range of vocabulary than learners who were not taught the system. All in all, strong evidence from behavioral and neuroscientific studies surrounding the benefits of utilizing gesture suggests that gesturing leaves behind some form of motor trace, thereby making the memory stronger and more accessible (for a review see Macedonia & von Kriegstein, 2012).

Today the use of gesture "as a facilitating educational tool that integrates body and mind" (Macedonia & von Kriegstein, 2012:393) is not a new concept; in fact, gesture has been a topic of great interest since ancient times (Kendon, 1997) with the Spaniard Quintilian, in ACE 100, the first to logically examine gesture (Graf, 1992; Magli, 1980; Quintilian, 1921), discovering that it could help to highlight the spoken word. However, due to various reasons, such as little empirical analysis and an emphasis on the learning of a language being an inherent procedure (Chomsky, 1975), the idea of using gesture as a learning tool did not gather much momentum and it subsequently failed to make it into mainstream teaching and learning.

#### 1. 3. Gesture classification

In spite of gesture attracting a great deal of interest since antiquity, it can be a phenomenon that is difficult to explicitly define. Indeed, there have been many classifications used to define gesture ranging from Efron (1972) to Rime and Schiaratura (1991), to McNeill (1992) - to name but a few. No system has become universal; nevertheless, a great number of researchers choose to adopt an adaptation of the taxonomy proposed by McNeill (1992), whereby gestures are made of four types: iconic, metaphoric, deictics and beats.

*Iconic* gestures refer "to a concrete event, object, or action" (McNeill, 1992:77) and are directly related to the semantic content of the speech taking place; an example of which may be using one's hands to depict a shape such as a triangle.

*Metaphoric* gestures are "similar to iconic gestures in that they make references to a visual image" (Roth, 2001:370), but are more abstract in nature than iconic gestures and can be more difficult to define.

Deictic gestures refer to abstract or concrete pointing, and are strongly linked to early language learning in children (Özçalışkan & Goldin-Meadow, 2005). Beats or batons (Efron, 1972) can follow a rhythm and be used to emphasise a theme. Politicians are particularly adept at using these kinds of gesture, which can include a simple up and down motion of the hand used to highlight specific utterances (Roth, 2001), to regulate turn-taking amongst speakers, or to confirm understanding (Bavelas et al., 1995).

According to McNeill (1992) and Kendon (2004), gestures have unit or stages. One unit called the *G-unit* "begins the moment the limb begins to move and ends when it has reached a rest position again" (McNeil, 1992, p. 83) containing obligatory and optional phases such as: *preparation*, *pre-stroke hold*, *post stroke hold* and *retraction*. A gesture begins with the hands in a resting position before they then follow a course of movement that anticipates speech (Kendon, 2004). This is the preparation for gesturing before the spoken word takes place. The second stage is the stroke, which acts as the main body of the gesture, whereby the movement of the hand or arm corresponds with speech. The final stage is the retraction when the hand or arm returns to its starting position. Gesture is of course open to great interpretation and defining when one gesture ends and another begins can be difficult, nevertheless it is important to highlight these phases in order to establish the mechanics of how people gesture and to interpret and classify the gestures that take place during communication.

#### 1. 4. Relationship between speech and gesture

Over the past forty years, gesture studies have had several contributions from different perspectives in attempting to explain the relationship between speech and gesture.

There are three more prominent, but differing views including McNeill (1992). Here speech and gesture form a compact unit and are tightly connected to each other. Indeed, some evidence suggests that the two are so intricately linked that "spontaneous gesture production occurs even in the face of damage to brain regions involved in motor control" (Freeman & Nunez, 1999, p. 27).

A second view regarding this relationship is that gesture aids in lexical retrieval (Krauss, 1998; Krauss & Hadar, 1999), whereby "the production of gesture activates spatio-dynamic features of the concept in question...this in turn activates the lexical affiliate of that concept in memory and leads to successful articulation of the word" (Iverson & Thelen, 1999, p. 20).

The third hypothesis is that speech and gesture occur in isolation and are separate communicative systems where gesture serves as a support system for speech when disruption occurs (Butterworth & Beattie, 1978; Hadar, 1989).

Gullberg (2006) has proposed that in spite of the on-going debate surrounding the relationship between gesture and speech, the mounting evidence continues to suggest that the two are inextricably linked – a notion that is supported by neurophysiological evidence (Freeman & Nunez, 1999). Indeed "tasks requiring precisely timed movements of the vocal tracts and hands and arms appear to share common brain mechanisms...with the foundations of these linkages in place at birth" (p.27).

A popular approach to exploring the relationship between speech and gesture has been via studying children. Here investigators have surmised that if indeed gesture and speech are part of a combined unit then gestures may play an important role in language development (Kelly et al., 2002). For instance, when learning new vocabulary, gesture can enhance the experience of individuals by making the learning more memorable. In fact, "enhancing the quantity of memorized items and prolonging their longevity, and enactment also improves the accessibility of the learned words" (Macedonia & von Kriegstein, 2012, p. 394). This learning experience, it seems, does not only lend itself to concrete words, but can also aid in the learning of more abstract lexis and can be used to assist in adults learning new vocabulary. In a study by Macedonia and Knösche (2011), participants learned words embedded in various sentences. The researchers concluded that: "enactment, as a complement to audiovisual encoding, enhances memory performance not only for concrete but also for abstract words" (p.396).

#### 1. 5. Gesture in education

Research within education has implied that embracing gesture can wield many benefits. One suggestion by Cook and Goldin Meadow (2006) is that gesturing can free up mental capacity, and influences the process of information exchange between teachers and students (Kelly et al., 2008). Another example of a potential advantage is in education during assessment where teachers could be trained to incorporate gesture into making more appropriate student appraisal.

Attempts have already been made to incorporate nonverbal behaviours, such as gesture, into assessing proficiency levels. Bachman (1990, 1991) created the Communicative Language Model in order to inform the teaching and testing of nonverbal elements within communication. Jungheim (1995) has also called for learners to be assessed for their nonverbal ability and suggested that tests such as the Nonverbal Ability Scales Test (NOVA), could be used to help students become more culturally aware of the differences which exist within nonverbal communication.

The studies examined previously support the fact that gesture can play a role in learning, but the mechanisms that underlie all of the processes involved is not yet fully understood. Research is beginning to suggest that "gestures are multi-functional and serve both addressee-directed, communicative and speaker directed internal functions (Gullberg, 2010, p. 77). Nonetheless studies into gesture have suffered a large amount of neglect over the past few decades and it is undoubtedly an area that would benefit from further research.

## 2. The Study

The objective of this study was to consider the extent to which teachers may be aware of gesture, how they interpret gesture and how they view it as a learning tool in improving language proficiency.

For the purposes of this study, gestures were defined as "spontaneous, mostly unconscious speech-related movements of the hands, arms, or head and function in direct relationship to the particular linguistic and social context on which they occur in a speaker's (or a listener's) behaviour" (Sime, 2006, p. 212).

All participants were, or had been within the previous twelve months leading up to the study, teaching English as an additional language. They were selected randomly as they themselves approached the researcher to take part in the study. The volunteers were made up of native English speakers who were living in various countries including: Brazil, Italy, Spain, Japan, the United States, the United Kingdom, and Turkey. Respondents were also involved in every level of education and had various qualifications. Indeed, 5% of the 186 respondents had doctoral degrees; 52% had master's degrees, and nearly 30% held a qualification in Teaching English as a Foreign Language (TEFL). Over a fifth (22%) had a Certificate in English Language Teaching to Adults (CELTA) or its Diploma equivalent, while 5% of respondents had no teaching qualifications whatsoever.

This study adopted a qualitative descriptive approach, which enabled the researcher the opportunity to gather rich data about teachers' perceptions on gesture. This type of methodology places the researcher in a unique position, as there is a need to establish a rapport with participants who will impart their own thoughts and feelings. Such a technique can raise important points for discussion that are of particular significance to teachers and administrators and because it does "not require researchers to move as far from or into their data" (Sandelowski, 2000, p. 335)

The specific methods used in this study were utilized in an attempt to produce the necessary data and included a questionnaire and semi-structured interviews of teachers who had seen the exemplar video. The video was selected from a teacher training DVD series (Carr, 2006) due to the clarity and professionalism of the recording, but also because of the number of gestures within the teaching performance.

Volunteers who took part in the interviews were asked to watch the first 3 minutes and 30 seconds of the video – initially with the sound on without making notes. In an attempt to give both linguistic and nonverbal elements of the teacher's performance equal exposure when viewing the video, volunteers were then asked to watch the video without sound, before watching the video for a third time with sound and asked to comment specifically on features of the teacher's performance they deemed memorable. If the interviewees had not chosen any nonverbal aspects of the teacher's performance then, via semi structured questions designed to use in the interview where deemed appropriate, they were asked specifically about their thoughts on the teacher's gesturing during the lesson.

Participants were not informed of the exact nature of the study, as the aim was for teachers to see if they noticed the gesturing performance without being prompted. The interview and the viewing of the video were scheduled to take place within 24 hours of each other in order to keep the video fresh in the memory of the interviewee.

The questionnaire consisted of 16 questions, which were designed to reflect the perceptions of teachers towards gesturing as well as identifying opportunities for professionals to address nonverbal behaviour within their professional development. Both closed and open ended questions were incorporated into the questionnaire in order to provide "graphic examples, illustrative quotes and... to identify issues not previously anticipated" (Dörnyei, 2007, p. 107), and to provide opportunities to

include descriptive analyses in order to substantiate or refute claims from the interview data.

## 3. Data analysis

Data from the study underwent scrutiny via thematic analysis (Boyatzis, 1998) and coding was used in a recursive comparative format whereby themes such as *positive* reinforcement and organizing pairs emerged from the interviews. This method was adopted, as when the collection of data had begun it became clear that other 'new' data might also be appropriate for collection. Comments were then tentatively classified into different groups, which were categorised to represent the perceived functions of the gesture that were identified by the interviewees. Such a coding system was utilized to "pull together and categorise a series of otherwise discrete events, statements, and observations" (Charmaz, 1983, p. 112).

In spite of not being told what to look for in the teacher's performance, all of the participants were immediately aware of the gestures made by the teacher and thought that they performed different tasks within the video extract in relation to "the mental, emotional or inter-relational processes that these were seen to enhance or facilitate" (Sime, 2006, p. 217).

The categories used to group comments of the interviews were similar to those used in Sime's study (2006) and were categorized as the following:

- 1. Comments related to the teachers' attempts at managing and organizing the class and the activities taking place
- 2. Comments referring to gestures where the speech did not match the accompanying gesture
- 3. Comments that referred to the significance the gestures had on the learning taking place

## 3. 1. Organisational function



Figure 1 Video grab of a deictic gesture when giving out instructions

Participants highlighted certain gestures as having an organizational or management function. These occurrences were explained as moments of transition between different phases of the lesson (e.g. introduction, setting up the task, seeking clarification) or in organizing the interaction taking place. Some interviewees identified moments where the teacher's gestures were used to initiate the class activity with the intention being for the class to follow the instructions.

12: The pointing he uses enabled students to organize themselves quickly and without mass confusion.

The teacher in the video often used deictic gesturing for classroom management, in particular to indicate group destinations for a task by selecting individuals. One of the participants felt that the gestures used by the teacher were influenced not just by the level of the learners but also by their behavior and attitude.

16:The use of gesture depends on the class. If I gestured a lot in front of my class then they would laugh at me. Maybe it's different for teachers who teach more attentive students like the one's here in the video. He uses gestures for group tasks and not like I do for behaviour management.

In spite of only having access to a small part of the lesson, interviewees strongly felt that the teacher had built up a rapport with the class and was successfully able to use his gestural style to manage the class.

#### 3. 2. Mismatch in function of teachers' gesturing

All of the volunteers taking part in the interviews suggested that there were gestures made by the teacher that did not make sense and appeared to be out of context with the accompanying speech. One gesture in particular was commented on by several of the participants, some of whom were perplexed as to why that gesture would accompany such a word or phrase.



Figure 2 Video grab of a iconic gesture to indicate an object

15: When he asks the class to take out the letter when he is referring to the interview. If you don't catch what he has said then you cannot understand what he is talking about.

Another gesture pinpointed was when he told students to keep the letter for five minutes, but in fact held out both hands.

13: Some of the students might think he meant ten minutes instead, so that might be tricky.

All of the interviewees also indicated that some gestures were used on more than one occasion with more than one meaning. One particular example was the gesture used to imitate 'mind', which also doubled-up for 'listen' and 'ideas'.

12: Some of his gesturing does not match. Like when he says some ideas. To me the gesture he uses means 'crazy', so he uses that gesture for too many things.

When participants were probed further on this matter and asked how this might affect learning and understanding, the general consensus was that it would be detrimental to students' learning.

I4: Because he used the same gesture to indicate at least three different things I don't know how useful that would be. I mean yes it's a gesture and it might help students in some ways but if students understand that gesture to mean one thing and then it's supporting something else. I'm not sure how useful that would be.



Figure 3 Video grab of a gesture mismatch

Despite such a high gestural frequency, one participant felt that although the gesturing was a 'bit over the top', there was the possibility that learners may have grown accustomed to the teacher's gestural repertoire.

## 3. 3. Cognitive function of teachers' gesturing

All of the interviewees felt that the teacher was striving to ensure that understanding was acquired by all of the learners no matter how elaborate or flamboyant the gesturing may have been. However, their interpretations for how effectively meaning was conveyed differed significantly. Some believed that he had to 'over-gesticulate' because of the culture in which he was teaching and the size of the class, while others were concerned that it may have simply been a habit.

I1: Primarily I got the impression he was trying to help communicate his meaning but there were other times when I wasn't sure if he was doing it out of habit or if he was trying to subtlety communicate the meaning.

The interviewees also differed with their opinions surrounding individual gestures and how effective they were in transmitting the meaning of a word or phrase. One gesture in particular was divisive in how approximate it was with the accompanying speech.



Figure 4 Video grab of an iconic gesture when discussing weekend activities

13: He made good use of gestures while he was explaining sleepy and mind. 16: When he's speaking about sleepy he pulls his eye down, whatever that might mean for the students or for himself.

When asked to consider the level of the learners within the class, all of the interviewees felt that the students were at the level of a beginner. Moreover, when interviewees were informed that the students were at an upper-intermediate level some were shocked and concerned – with one teacher even becoming angry upon the receipt of this information.

15: The gesturing is excessive. It's exaggerated and if they are upperintermediate then it's too much. There's no knowing how this might be holding learners back.

Part of a teacher's routine is to check for meaning and in the video extract the teacher would often clarify that students had understood what was being asked of them. This was done at the front of the class using large gestures, which some interviewees stated was a very important visual reinforcement to accompany the spoken phrase.

11: One really good use of gesture was when he used the 'thumbs-up' gesture to explain the difference between good and bad.

An additional example of these large gestures was when the teacher attempted to explain the difference between *confident* and *not confident* perhaps in an attempt to 'quickly and efficiently elicit understanding from everyone in the room.' Indeed one interviewee felt that it warranted particular mention, even if it was 'slightly unconventional.'

15: For the word confident, it was actually one of his strengths in the lesson as this was a hard word for the learners to grasp so he used gestures to express an antonym.

In addressing the differences in opinion for the function of various gestures within the video, one volunteer felt that there may be a difference between what a native speaker and a non-native speaker might think about individual gestures. She even felt that all second language teachers should already know, or be in the process of learning, a second language.

#### 3. 4. Using a video recording in reflective practice

One issue that initially surfaced during the pilot study was that many teachers may never have seen a video recording of their own teaching. This question was included in the questionnaire, and in the interview volunteers were asked to expand on their own experiences and feelings about having this included within standard reflective practice procedures for EFL teachers.

Only one of the seven interviewees was aware of such a practice on a modern foreign language (MFL) teacher training course that he had been part of the in the past; however, he openly admitted that it was small in scale and highly doubted that teachers from the course were able to carry this practice forward into their place of work.

Overall, participants had never been part of such an exercise in their own careers and many were unaware of any such practice within their current educational sector. Only two volunteers stated that they had been part of any such practice when they were students, but in the words of one interviewee; 'any such time had long now passed'. All of the interviewees were in favour of using video in one's reflective practice. Furthermore they all felt that it should be part of both initial teacher-training courses

and professional development once the teacher was in employment at a school or a higher educational institution.

I7: It's a very important thing to do and having been involved in MFL for over twenty years I can say that it seldom occurs, but yes it is always a useful type of thing to happen.

11: Absolutely it's a good idea and I'm sure it could be justified by administrators, however it would have to be carried out properly

Despite this level of support there was also a voice of caution from one volunteer who felt that teachers would object to its inclusion in reflective practice.

13: There's the extra time involved, I don't think some people will be happy or prepared to do it.

Nevertheless the fact remains that; overall, 50% of the 197 respondents had never seen a video of themselves teach. This included half (50%) of the teachers with over 21 years' experience (see Table 1).

Table 1
How often teachers had seen a video of their own teaching

Teaching experience	Never seen a video of themselves teach	Seen a video once	Seen a video twice	Seen a video three times	Seen a video four times or more
Less than a year	78%	11%	-	-	11%
1-5 years	40%	24%	8%	7%	21%
6-10 years	51%	22%	8%	5%	14%
11-15 years	53%	26%	5%	3%	13%
16-20 years	45%	18%	18%	14%	5%
21 years +	50%	16%	16%	6%	12%

#### 4. Discussion

Most respondents to the questionnaire indicated that a teacher uses gesturing as a form of self-expression. However, if a teacher is freely expressing themselves with their hands, some of who will do more than others, then this becomes their own interpretation, which may lead to more disparities and misunderstandings in the classroom. Indeed, volunteers also felt that there were several gestures that did not serve a pragmatic function, as they did not appear to hold a logical connection to the corresponding discourse. Despite only being asked to watch three and a half minutes of a lesson, it appears that, for teachers who are never given the opportunity to visually examine their own teaching performances, it is plausible that many gesture mismatches take place without the full knowledge of the teacher of ever carrying them out.

Olsher (2008) has mentioned that there is a danger that teachers who become too dependent on using nonverbal behaviour to convey meaning may have a detrimental affect with learners and "hinder the production of complete grammatical utterances" (p.151). Furthermore, gesturing too much and "visually over-scaffolding" aspects of the learning may hinder learners from attaining a higher speaking proficiency level

(Olsher, 2008); to which 56% of respondents agreed and felt that the use of gesturing should match the level of the learner.

Gesture is a topic that teachers need time to reflect on and with improvements in technology there is no reason why they cannot do this in an unobtrusive manner. Gesture can be an influential factor in successful learning taking place and teachers need to be trained to use gesture efficiently and effectively. In addition, administrators need to re-examine reflective practice procedures and incorporate gesture via the use of video recordings, which could, in turn, improve both the verbal and nonverbal aspects of the teaching taking place.

Gesture is a "fundamental part of a teacher's repertoire" (Lazaraton, 2004, p. 107), nevertheless without sufficient training and the means to reflect upon their teaching performances then teachers, like the one in the video used in this study, will continue to randomly interpret gesture in their own way, which may lead to missed learning opportunities and students underachieving. In recent times, studies into reflective practice, such as Penny and Coe (2004), have suggested that using a video recording can indeed be an effective strategy for improving teacher performance within a language-learning context. However, as this remains an area of teacher development yet to be fully established, the parameters surrounding its use are yet to fully realized. Indeed, "as educators establish a video analysis process, they need to decide how they will evaluate the effect of video on teachers' reflection" (Tripp & Rich, 2011, p. 685).

Conventional pedagogical practices tend to hover around using reading and listening materials in order to acquire elements of the target language - something that contradicts the methods of learning a native language. As teachers' gesturing can be unique and different from everyday co-speech gestures (Tellier, 2007), perhaps there is a need to utilize an approach which does not focus on the use of co-speech gestures, but is formed by the teacher and used within the classroom – whereby "both word and gesture are first observed then imitated...and are not produced spontaneously in order to accompany language" (Macedonia, 2013, p. 107). An example of such a system is the Voice Movement Icon Approach (VMI) conceived by Macedonia (2003) where gestures are not part of a "common gestural inventory," but are derived by the teacher to be used exclusively with students. Indeed over 60% of respondents from the questionnaire felt that negotiating using hand gestures was important. The utilization of such a system adds further credence for teachers to be trained accordingly in order to not associate the same word with the same gesture and to be made fully aware of their gestural performances before building a suitable repertoire to use with a group of learners. Nevertheless VMI's could "make L2 learning more natural and therefore more efficient" (Macedonia, 2013, p. 112) by taking advantage of the sensorimotor capabilities associated with learning a native language.

Such an approach may prove unpopular as some teachers may be unwilling, or unable, to vary their teaching style and instead rely upon more verbal strategies. Nevertheless, a study by Haught and McCafferty (2008), demonstrated how a varied teaching style can have a positive impact on students understanding. Here drama techniques were used to encourage students to copy the gesturing of a native speaker in an effort to further boost their language proficiency. With this in mind, acting courses could be utilized to target non-verbal communication in order to improve teacher competencies and effective instruction (Hayes, 2013; Özmen 2010).

#### 5. Conclusion

Thomas and Tchuidi (1999) have stated that: "people's ability to control their body language is grossly exaggerated" (p.133). However, this does not seem to be the case with teaching professionals as Hostetter (2006) and his colleagues have shown. In spite of this study only involving math's teachers, they were able to "bring their gestures under conscious control and use them effectively based on a brief tutorial" (p.1528). Nevertheless, this study remains in isolation and it is yet be seen just how much professional development, if any, has been offered to language teachers in seeking to train their own gesturing performances in class. In fact, 70% of questionnaire respondents stated that they had never received any training or professional development related to hand gesturing.

Gesture undoubtedly plays a significant role in SLA and findings from the study, based on the data examples, suggest that teachers view gesture in a positive manner and native English speakers commonly attribute the same functions and meanings surrounding its use. As learning progresses towards enveloping multimodal elements, perhaps more forums need to be created for teachers to have access to relevant professionals, journals and research that can serve to reinvigorate teaching practice, boost knowledge and allow cross-disciplinary collaboration.

## Acknowledgements

This paper is based on my MA thesis which I completed at Newcastle University in 2012.

#### References

- Acredolo, L. & Goodwyn, S. (1988). Symbolic gesturing in normal infants. *Child Development*, *59*, 460-466.
- Alibali, M. W., & Nathan, M. J. (2007). Teacher's gestures as a means of scaffolding students' understanding: Evidence from an early algebra lesson. In R. Goldman, R. Pea, B. Barron, & S. J. Derry (Eds.) *Video Research in the Learning Sciences*, (pp. 349-365). Mah Wah, NJ: Erlbaum.
- Allen, L. Q. (1995). The effects of emblematic gestures on the development and access of mental representations of French expression. *Modern Language Journal*, 79(4), 521-529.
- Allen, L. Q. (2000). Nonverbal accommodations in foreign language teacher talk. *Applied Language Learning*, 11, 115-176.
- Bachman, L. F. (1990). Fundamental Considerations in Language Testing. Oxford: Oxford University Press.
- Bachman, L. F. (1991). What does language testing have to offer? *TESOL Quarterly*, 25(4), 671-704.
- Barnett, M.A. (1983). Replacing teacher talk with gestures: Nonverbal communication in the foreign language classroom. *Foreign Language Annals*, 16(3), 173-176.
- Bavelas, J. B., Chovil, N., Coates, L., & Roe, L. (1995). Gestures specialised for dialogue. *Personality and Social Psychology Bulletin*, 21, 394-405.
- Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development.* Thousand Oaks, CA: Sage Publications.
- Butterworth, B., & Beattie, G. (1978). Gesture and silence as indicators of planning in speech. In R. N. Campbell & P. T. Smith (Eds.), *Recent advances in the*

- *psychology of language: Formal and experimental approaches,* (pp. 347-360). London: Plenum.
- Carr, D. (2006). *Teacher training DVD series: 'DVD 15: Speaking'* London: International House Trust Limited.
- Charmaz, K. (1983). The grounded theory method: An explication and interpretation. In R.M. Emerson (Eds.), *Contemporary Field Research: A collection of Readings*, (pp. 109-128) Boston: Little Brown and Company.
- Chomsky, N. (1975). Reflections on Language. New York: Pantheon Books
- Cook, S. W., & Goldin-Meadow, S. (2006). The role of gesture in learning: do children use their hands to change their minds? *Journal of Cognition and Development*, 7(2), 211-232.
- Corballis, M. C. (1999). The gestural origins of language. *American Scientist*, 87(2).
- Dörnyei, Z. (2007). Research Methods in Applied Linguistics. Oxford: Oxford University Press.
- Efron, D. (1972). Gesture, Race, and Culture. The Hague: Houton.
- Freeman, W. J., &Nunez, R. (1999). Reclaiming Cognition: the primacy of action, intention and emotion. UK: Imprint Academic.
- Goldin-Meadow, S. (2004). Gestures role in the learning process. *Theory into Practice*, 43, 314-321.
- Graf, F. (1992). Gestures and Conventions: The Gestures of Roman Actors and Orators. In J. Bremmer and H. Roodenburg (Eds.), *A Cultural History of Language*, (pp.36-58). Ithaca: Cornell University Press.
- Gullberg, M. (2006). Some reasons for studying gesture and second language acquisition (Hommage à Adam Kendon). *International Review of Applied Linguistics in Language Teaching*, 44, 103-124.
- Gullberg, M. (2010). Methodological reflections of gesture analysis in second language acquisition and bilingualism research. *Second Language Research*, 26(1),75-102.
- Hadar, U. (1989). Two types of gesture and their role in speech production. *Journal of Language and Social Psychology*, 8, 221-228.
- Hostetter, A. B., Bieda. K., Alibali, A. W., Nathan, M. J., & Knuth, E. J. (2006). Don't just tell them, show them! *Teacher can intentionally alter their instructional gestures*. In R. Sun & N. Miyake (Eds.) Proceedings of The 28<sup>th</sup> Annual Conference of the Cognitive Science Society, (pp.1523-1528). Mah Way, NJ: Erlbaum
- Haught, J. R., & McCafferty, S. G. (2008). Embodied language performance: Drama and the ZPD in the second language classroom. In J. P. Lantolf & M. Poehner (Eds.), *Sociocultural theory and the teaching of second languages, (pp, 139-162)*. Bedfordshire, UK: Equinox.
- Hayes, J. (2013). Gesture in actor training: embodied partial narratives. *Southern Semiotic* Review, (1), 1-14.
- Iverson, J. M., & Thelen, E. (1999). Hand, mouth and brain: The dynamic emergence of speech and gesture. *Journal of Consciousness studies*, 6(11-12), 19-40.
- Iverson, J. M., & Goldin-Meadow, S. (2000). The resilience of gesture in talk: gesture in blind speakers and listeners. *Developmental Science*, *4*(*4*), 416-422.
- Jungheim, N.O. (1995). Assessing the unsaid: The development of tests of nonverbal ability. In J.D. Brown & S. O. Yamashita (Eds.), *Language Testing in Japan*, (pp.149-165). Tokyo: JALT.

- Kelly, S.D., Singer, M., Hicks, J., & Goldin Meadow, S. (2002). A helping hand in assessing children's knowledge: instructing adults to attend to gesture. *Cognition and Instruction*, 20, 1-26.
- Kelly, S.D., Manning, S., & Rodak, S. (2008). Gesture gives a hand to language and learning: Perspectives from cognitive neuroscience, developmental psychology and education. *Language and Linguistics Compass*, 2, 1–20.
- Kendon, A. (1997). Gesture. Annual Review of Anthropology, 26, 109-128.
- Kendon, A. (2004). *Gesture: Visible Action as Utterance*. Cambridge, UK: Cambridge University Press
- Krauss, R. M. (1988). Why do we gesture when we speak? *Current Directions in Psychological Science*, 7, 54-59.
- Krauss, R. M., & Hadar, U. (1999). The role of speech-related arm/hand gestures in word retrieval. In L. S. Messing & R. Campbell (Eds.), *Gesture, speech, and sign,* (pp. 93-116). New York: Oxford University Press.
- Lazaraton, A. (2004). Gesture and speech in the vocabulary explanations of one ESL teacher: A microanalytic enquiry. *Language Learning*, *54(1)*, 79-117.
- Macedonia, M. (2003). Sensorimotor enhancing of verbal memory through 'Voice Movement Icons' during encoding of foreign language. University of Salzburg: PhD Thesis.
- Macedonia, M. (2013). Learning a Second Language Naturally the Voice Movement Icon Approach. *Journal of Educational and Developmental Psychology*, *3*(2), 102-116.
- Macedonia, M., Knösche, T.R. (2011). Body in mind: How gestures empower foreign language learning. *Mind, Brain, and Education5*, 196–211.
- Macedonia, M., & von Kriegstein, K. (2012). Gestures enhance foreign language learning. *Biolinguistics*, 6(3-4), 393-416.
- McCafferty, S. G. (2002).Gesture and creating zones of proximal development for second language learning. *Modern Language Journal*, 86, 192-203.
- Magli, P. (1980). Corpo e Linguaggio. Rome: Espresso Strumenti.
- McNeill, D. (1992). *Hand and Mind: What gestures reveal about thought*. Chicago: The University of Chicago Press.
- Neill. S., & Caswell, C. (1993). *Body Language for competent teachers*. London: Routledge.
- Neuliep, J. W. (2009). *Intercultural communication: A contextual approach* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Olsher, D. (2008). Gesturally-enhanced repairs in the repair turn: Communication strategy or cognitive language learning tool? In S. G. McCafferty & G. Stam (Eds.), *Gesture: Second Language Acquisition and Classroom Research*, (pp. 109-130). Routledge, London.
- Özçalışkan, Ş. & Goldin-Meadow, S. (2005). Gesture is at the cutting edge of early language development. *Cognition*, 96(3), 101-113.
- Özmen, K. S. (2010). Fostering Nonverbal Immediacy and Teacher Identity through an Acting Course in English Teacher Education. *Australian Journal of Teacher Education*, 35(6).
- Penny, A. R. & Coe, R. (2004). Effectiveness of consultation on student ratings feedback: a meta-analysis. *Review of Educational Research*, 74(2), 215-253.
- Pozzer-Ardenghi, L., & Roth, W-M. (2007). On performing concepts in science lectures. *Science Education*, 91(1), 96-114.
- Quinlisk, C.C. (2008). Nonverbal communication, gesture, and second language classrooms: a review. In S.G. McCafferty & G. Stam (Eds.), *Gesture: Second*

- Language Acquisition and Classroom Research, (pp. 25-44). Routledge, London.
- Quintilian. (1921). *The Institutio Oratoria*.(Translated from Latin by H.E. Butler). London: Heinemann.
- Rime, B. & Schiaratura, L. (1991). Gesture and speech, In R.S. Feldman and B. Rime (Eds.) *Fundamentals of Nonverbal Behaviour*, (pp. 239-284). Cambridge: Cambridge University Press.
- Roth, W. (2001). Gestures: Their role in teaching and learning. *Review of Educational Research*, 71(3), 365-392.
- Sandelowski, M. (2000). Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed methods studies. *Research in Nursing and Health*, 23, 246-255.
- Sime, D. (2006). What do learners make of teachers' gestures in the language classroom? *International Review of Applied Linguistics in Language Teaching*, 44(2), 211-230.
- Stam, G. (2006). Thinking for speaking about motion: L1 and L2 speech and gesture. *IRAL*,44(2), 143-169
- Stam, G., & McCafferty, S. G. (2008). Gesture studies and second language acquisition: a review. In S. G. Mccafferty & G. Stam (Eds.), *Gesture: Second Language Acquisition and Classroom Research*, (pp. 3-24). Routledge: London.
- Tellier, M. (2007). How do teachers' gestures help young children in second language acquisition? Proceedings of the meeting of International Society of Gesture Studies, *ISGS 2005: Interacting Bodies*, June, 15th-18th, ENS Lyon, France.
- Thomas, L. & Tchudi, S. (1999). *The English Language: An owner's manual*. Boston: Allyn and Bacon.
- Tripp, T., & Rich, P. (2011). Using video to analyse one's own teaching. *British Journal of Educational Technology*, 43(4), 678-704.
- Ward, L., & von Raffler-Engel, W. (1980). The impact of nonverbal behaviour on foreign language teaching. In W. von Raffler-Engel (Ed.), *Aspects of Nonverbal Communication*, (pp.287-304). Bath: Pitman Press.

## Appendix 1 Example of gestural analysis from teacher's performance

NB: Co-speech gesture occurs in red.

Speech	Gesture description	Video grab	Gesture number
"speaking"	Teacher points to random students	at au	1
"do you have the letter (0.6) application letter" (.)	Teacher claps hands together like a crocodile snapping its jaws		2
"we're going to listen again" (.)	Teacher revolves index finger around the side of his head		3
"not sleepy"	Teacher points, with his right hand, towards his right eye		4